

Work Order ID 158048

Wednesday, March 08, 2017 8:32:36 AM

158048

Page 1

Item ID: D4888-041L02

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Dome Light Air Vent Assembly, Black

Start Date: 3/13/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 3/15/2017 Req'd Qty: 2.00

2

Customer:

Reference: SCHEDULED

Approvals: Process Plan:

Date: MAR 08 2017

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4888	A								
100		0.00							DAS 07 9-89
100						x2			17/03/15
HandThermo	Memo	0.00							
Hand Finishing Thermoforming	Pick Kit								
110		0.00							DAS 07 9-89
110						x2			17/03/15
Small Fab	Memo	0.15							
Small Fab	Assemble as per Dwg D4888-041								
	1) Install air vents								
	2) Install lights								
	3) Install rheostats								
	4) Install wiring harness								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
Description Work Order Deviation			Disposition																		
						Completed By															
						Lead hand / Supervisor Approval Verification															
			QC / QA Coordinator Approval																		
Root Cause			FAULT CATEGORY																		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																			
Misidentified ☐	Past Due ☐																				

Work Order ID 158048

Wednesday, March 08, 2017 8:32:36 AM

158048

Page 2

Item ID: D4888-041L02**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Dome Light Air Vent Assembly, Black**Start Date:** 3/13/2017 **Start Qty:** 2.00***2*****Cust Item ID:****Required Date:** 3/15/2017 **Req'd Qty:** 2.00***2*****Customer:****Reference:** SCHEDULED**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start*****NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00							DAS 38 9-89
120						2			
QC	Memo	0.00							
Quality Control									MAR 15 2017
130	Identify as per dwg & Stock Location: FF	0.00							DAS 41 9-89
130						2			
Packaging	Memo	0.00			DAS 6 9-89				17-3-16
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									17/3/21
QC	Memo	0.03							
Quality Control									DAS 21 9-89 MAR 16 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
240 88 34 12				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Wednesday, March 08, 2017 8:32:41 AM

Page 1

Work Order ID: 158048

158048

Parent Item: D4888-041L02

D4888-041L02

Parent Item Name: Dome Light Air Vent Assembly, Black

Start Date: 3/13/2017

Required Date: 3/15/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev A New Issue 13/09/13 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4886-1		Manufactured	No			100	Each	5.0000	2	4			
---------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

D4886-1

Air Vent

DAS
07
9-89

17/03/15

Location

Loc Qty

Loc Code

MF005

5

147622

1

153580

4

D4888-1L02

Manufactured No

100

Each

0.0000

1

2

D4888-1L02

Dome Light Housing, Black

D4897-041

Manufactured No

100

Each

4.0000

1

2

D4897-041

Dome Light Wiring

DAS
07
9-89

17/03/15

Location

Loc Qty

Loc Code

MF007

4

147796

4

D4898-1

Manufactured No

100

Each

82.0000

12

24

D4898-1

Screw, Stainless Steel

DAS
07
9-89

17/03/15

Location

Loc Qty

Loc Code

MF006

82

153289

82

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :	Step #:	QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : ☐					

Work Order ID: 158048

158048

Parent Item: D4888-041L02

D4888-041L02

Parent Item Name: Dome Light Air Vent Assembly, Black

Start Date: 3/13/2017

Required Date: 3/15/2017

Start Qty: 2.00

Required Qty: 2.00

DAS
07
9-89

100 Each 7.0000 1 2

**

D4906-1*
Knob

Manufactured No

Location

MF004

151529

7
7

Loc Qty

Loc Code

24

**

MS210421 06
Nut

Purchased No

Location

ST303

m136643
m136741

144
44
100

Loc Qty

Loc Code

6

**

NAS1149F0663P
WASHER

Purchased No

Location

ST2622

M136263

160
160

Loc Qty

Loc Code

24

**

NAS1149FN632P
Washer

Purchased No

Location

ST264

m129163

57
57

Loc Qty

Loc Code

34

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

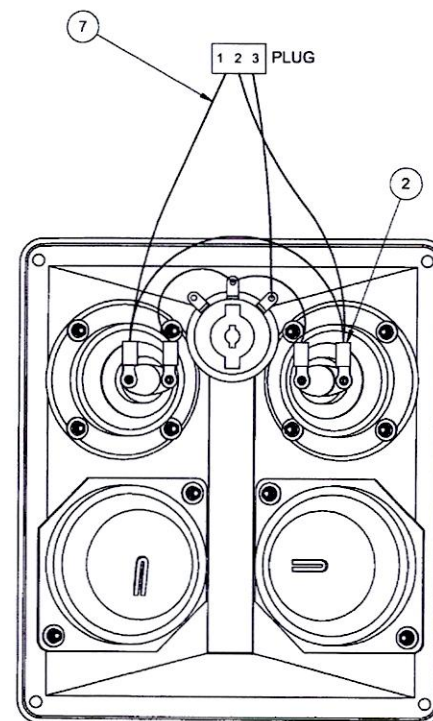
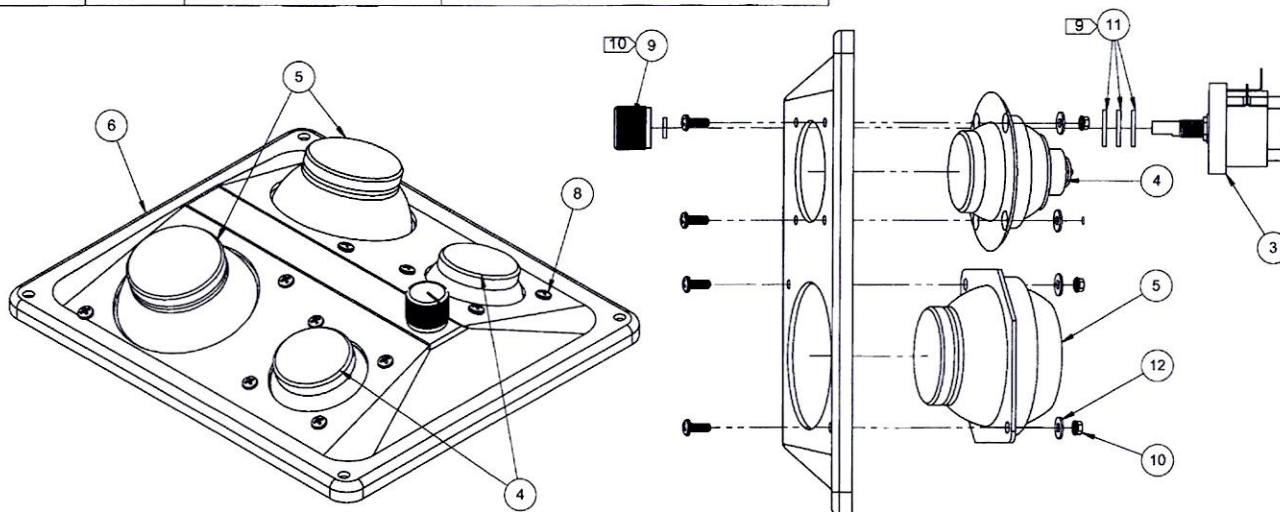
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4888-041	DOME LIGHT AIR VENT ASSEMBLY
2	4	D4290-21 (REF)	RING TERMINAL (PART OF D4897-041)
3	1	D4864-1 (REF)	RHEOSTAT (PART OF D4897-041)
4	2	D4872-1 (REF)	LIGHT FIXTURE (PART OF D4897-041)
5	2	D4886-1	AIR VENT
6	1	D4888-1	DOME LIGHT HOUSING
7	1	D4897-041	DOME LIGHT WIRING HARNESS
8	12	D4898-1	SCREW
9	1	D4906-1	KNOB
10	12	MS21042L06	NUT
11	3	NAS1149F0663P	WASHER
12	12	NAS1149FN632P	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 158048
MAR 08 2017



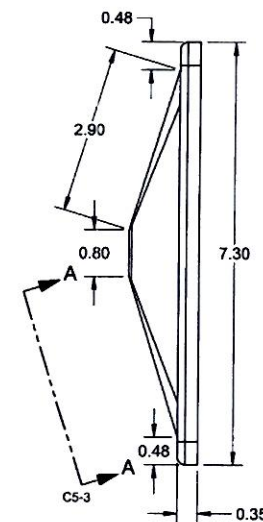
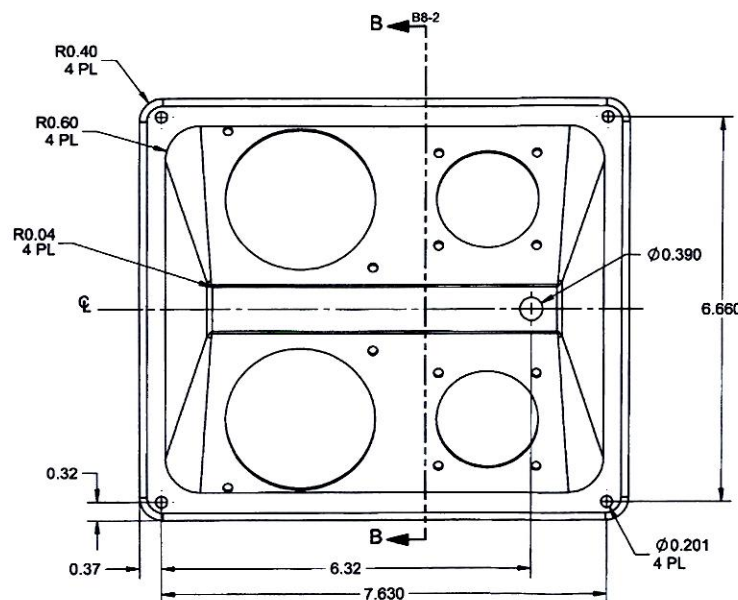
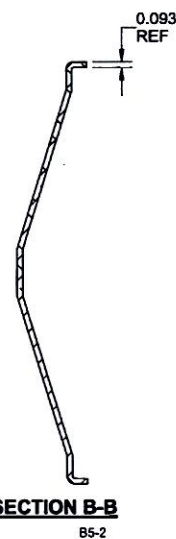
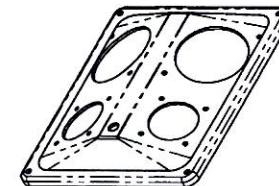
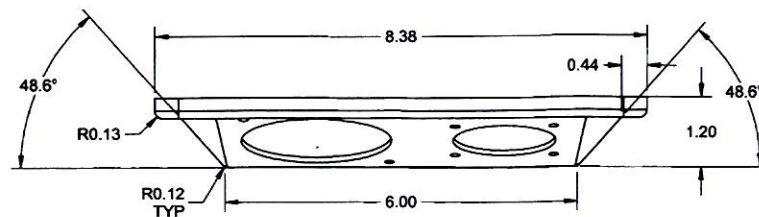
RELEASED
2013-09-16
nw

D4888-041 DOME LIGHT AIR VENT ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.43 lbs
- 8) REPLACES GENEVA P/N GA129-12 P112-L
- 9) OPTIONAL: USE ADDITIONAL WASHERS TO SHIM AS REQUIRED
- 10) NUT INCLUDED WITH RHEOSTAT

A	NEW ISSUE	DESCRIPTION	BY	DATE
REV.				
DESIGN	OS	DART AEROSPACE USA, INC.		13.07.11
DRAWN	OS	KENT, WA		
CHECKED	OS	DRAWING NO.	REV. A	
MFG. APPR.	OS	D4888	SHEET 1 OF 3	
APPROVED	OS	TITLE	SCALE	
DE APPR.	OS	DOME LIGHT AIR VENT ASSY	NTS	
DATE	13.07.11	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS COMPREHENSION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		



NOTES:

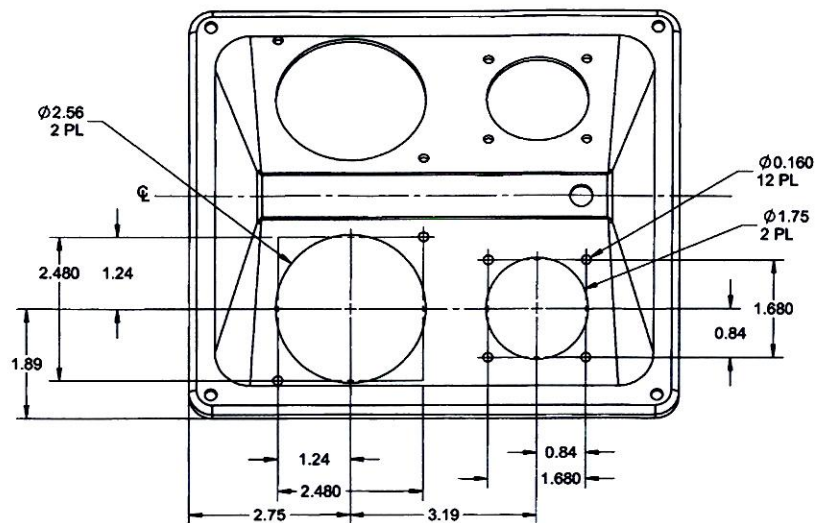
- 1) MATERIAL: SEE TABLE
- 2) TOOLING: THERMOFORM PER MOLD DT9932 PER QSI 022 TRIM PER DT9932
- 3) FINISH: N/A
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: N/A
- 8) WEIGHT: 0.22 lbs
- 9) REPACES GENEVA P/N GA129-7
- 10) PART SHAPE AND GEOMETRY IS CONTROLLED BY TOOLING
- 11) MINIMUM THICKNESS AFTER FORMING IS 0.060" FOR FLANGES AND 0.070" ELSEWHERE

D4888-1 DOME LIGHT HOUSING

PART NUMBER	DESCRIPTION
D4888-1LBL	F6006 SUEDE/POLISHED 701 BLACK LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-02)
D4888-1LLG	F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-07)

DESIGN	<i>[Signature]</i>	DART AEROSPACE USA, INC.	
DRAWN	<i>[Signature]</i>	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4888	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DOME LIGHT AIR VENT ASSY	NTS
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RELEASED
2013-09-16



VIEW A-A
B2-2

RELEASED
2013-09-16

DESIGN		DART AEROSPACE USA, INC.	
DRAWN		KENT, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4888	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		DOME LIGHT AIR VENT ASSY	NTS
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